

II. REMARKS

Claims 19 through 39 stand rejected. Claim 19 is being amended. Claims 29 through 39 are being cancelled.

Specifically, claim 19 requires loading at least two different parameter sets corresponding to different images into an imaging device, and collecting first image data of a first view of a patient according to a first parameter set of the different parameter sets. If the collection of the first image data is completed as specified in the first parameter set, a delay period is dynamically adjusted and the collection of the first image data is stopped for the delay period. Second image data of a second view of the patient is then collected, and the first and second image data are processed to produce multiple images of the patient.

Stopping for a dynamically adjustable delay period before the collection of subsequent image data offers certain benefits and advantages. For example, the delay period can be adjusted to correspond to the time it takes for a patient to exhale and inhale and again hold his or her breath between taking raw image data for different orientations, such as a horizontal view versus a previous vertical view, while the patient remains at the same location, and then processing the raw image data into final images. Alternatively, the delay period can be dynamically adjusted such that image data for a different orientation can be taken immediately after taking image data for a previous orientation while the patient holds a single breath and remains at the same location, such that the patient needs to hold his or her breath only once while image data for multiple views are taken.

Unlike convention MRI systems, the present invention facilitates carrying out a plurality of views using different sets of parameters which are separated by the adjustable delay period and storing the image data corresponding to each view in designated memory locations so that a image processing module can, upon completion of the scan sequences of the views, process the image data for each of the views.

After entering this amendment, claims 19 through 28 remain pending. Reconsideration of this application in view of the above amendments and the following remarks are respectfully requested.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 19, 20, 22-25, 29-31, and 35-39 have been rejected under 35 U.S.C. § 103(a) as being obvious over Applicants' admission of the prior art. Claims 19, 20, 22-25, 29-31, and 35-39 have also been rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,657,757 to Hurd et al. ("Hurd"). Claims 26-28 and 32-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Hurd in view of U.S. Patent No. 5,363,844 to Riederer et al. ("Riederer"). Claim 21 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' own admission or Hurd alone and further in view of U.S. Patent No. 4,875,485 to Matsutani ("Matsutani"). After careful consideration of these rejections, Applicants traverse.

The Examiner concedes that the prior art does not disclose stopping the collection of image data for a delay period, but contends that such stopping is

obvious. None of the references, however, teaches or suggests loading at least two different parameter sets into an imaging device corresponding to different images, collecting first image data according to a first parameter set of the different parameter sets, testing to determine if the collection of the first image data is completed as specified in the first parameter set, and if the collection is completed, dynamically adjusting a delay period and stopping the collection of the first image data for the delay period, as now required by amended claim 19. Claim 19 further requires collecting second image data after the delay period according to a second parameter set.

Rather, Hurd's method merely loads a pulse sequence parameter, executes a pulse sequence, separately processes and stores the acquired image data, and loops back to repeat the steps for a next pulse sequence parameter. This loop is repeated until each pulse sequence is executed with its particular set of stored parameters. The system then waits for a selected time period *after the collection of all the image data* to determine if the scan is complete.

Thus, Hurd's system, unlike Applicants' invention, does not collect images corresponding to different parameter sets and stop for a dynamically adjustable delay period *between* the collection of the different image data if the collection of the previous image data is completed as specified in the respective parameter set before collecting the next image data according to its respective parameter set. Indeed, Hurd fails to appreciate the advantages mentioned previously of an imaging procedure that incorporates features of Applicants' invention as now recited in amended claim 19.

Accordingly, reconsideration of the rejections under 35 U.S.C. § 103(a) and allowance of claim 19 is respectfully requested.

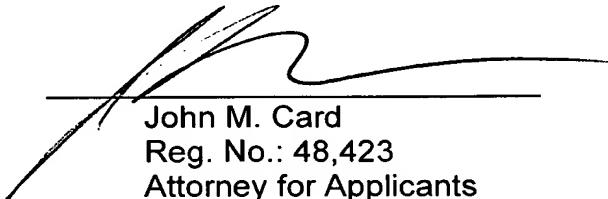
Because neither Riederer nor Matsutani overcomes the deficiencies of Hurd, and because claims 21 through 28 depend directly or indirectly from amended claim 19, the reasons for allowance of claim 19 apply as well to the dependent claims.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the pending claims (Claims 19 through 28) are now in condition for allowance. If the Examiner believes that personal contact would be advantageous to the disposition of this case, please contact the undersigned Attorney at the earliest convenience of the Examiner.

Respectfully submitted by,

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John M. Card
Reg. No.: 48,423
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610
(734) 302-6000